

GENERAL NOTES

- City of Columbus and Ohio Department of Transportation Construction and Material Specifications, current editions, and any supplements thereto (hereafter referred to as Standard Specifications), shall govern all construction items unless otherwise noted. If a conflict between specifications is found, the more strict specification will apply as decided by the City Engineer. Item Numbers listed refer to City of Columbus Item Numbers unless otherwise noted.
- The City Engineer will not be responsible for means, methods, procedures, techniques, or sequences of construction that are not specified herein. The City Engineer will not be responsible for safety on the work site, or for failure by the Contractor to perform work according to contract documents.
- The Developer or Contractor shall be responsible to obtain all necessary permits including but not limited to Ohio EPA Permits to Install (PTI) and Notices of Intent (NOI), Building Permits, etc.
- The Contractor shall notify the City of Dublin Division of Engineering in writing at least 3 working days prior to beginning construction.
- The Contractor shall be solely responsible for complying with all federal, state and local safety requirements including the Occupational Safety and Health Act of 1970. The Contractor shall exercise precaution always for the protection of persons (including employees) and property. It shall also be the sole responsibility of the Contractor to initiate, maintain and supervise all safety requirements, precautions and programs in connection with the work, including the requirements for confined spaces per 29 CFR 1910.146.
- Following completion of construction of the site improvements and before requesting occupancy, a proof survey shall be provided to the Division of Engineering that documents "as-built" elevations, dimensions, slopes and alignments of all elements of this project. The proof survey shall be prepared, signed and submitted by the Professional Engineer who sealed the constructions drawings.
- The Contractor shall restrict construction activity to public right-of-way and areas defined as permanent and/or temporary construction easements, unless otherwise authorized by the City Engineer.
- The Contractor shall carefully preserve bench marks, property corners, reference points, stakes and other survey reference monuments or markers. In cases of wilful or careless destruction, the Contractor shall be responsible for restorations. Resetting of markers shall be performed by an Ohio Professional Surveyor as approved by the City Engineer.
- Non-rubber tired vehicles shall not be moved on or across public streets or highways without the written permission of the City Engineer.
- The Contractor shall restore all disturbed areas to equal or better condition than existed before construction. Drainage ditches or water courses that are disturbed by construction shall be restored to the grades and cross-sections that existed before construction.
- Tracking or spilling mud, dirt or debris upon streets, residential or commercial drives, sidewalks or bike paths is prohibited according to Section 97.38 of the Dublin Code of Ordinances. Any such occurrence shall be cleaned up immediately by the Contractor at no cost to the City. If the Contractor fails to remove said mud, dirt, debris, or spillage, the City reserves the right to remove these materials and clean affected areas, the cost of which shall be the responsibility of the Contractor.
- Disposal of excess excavation within Special Flood Hazard Areas (100-year floodplain) is not permitted.
- All signs, landscaping, structures or other appurtenances within right-of-way disturbed or damaged during construction shall be replaced or repaired to the satisfaction of the City Engineer. The cost of this work shall be the responsibility of the Contractor.
- All field tile broken or encountered during excavation shall be replaced or repaired and connected to the public storm sewer system as directed by the City Engineer. The cost of this work shall be the responsibility of the Contractor.
- All precast concrete products shall be inspected at the location of manufacture. Approved precast concrete products will be stamped or have such identification noting that inspection has been conducted by the City of Columbus. Precast concrete products without proof of inspection shall not be approved for installation.
- Backfill within a 1:1 influence line of existing structures (houses, garages, etc.) or public infrastructure (pavement, curbs, sidewalks, bike paths, etc.) shall be compacted granular backfill according to Item 912 of the Standard Specifications or Flowable CDF, Type III according to Item 636. Item 911 of the Standard Specifications may be used elsewhere.
- The Contractor shall submit a copy of the approved construction drawings and a list of proposed precast concrete product manufacturers to the City of Columbus Construction Inspection Division before commencing construction.

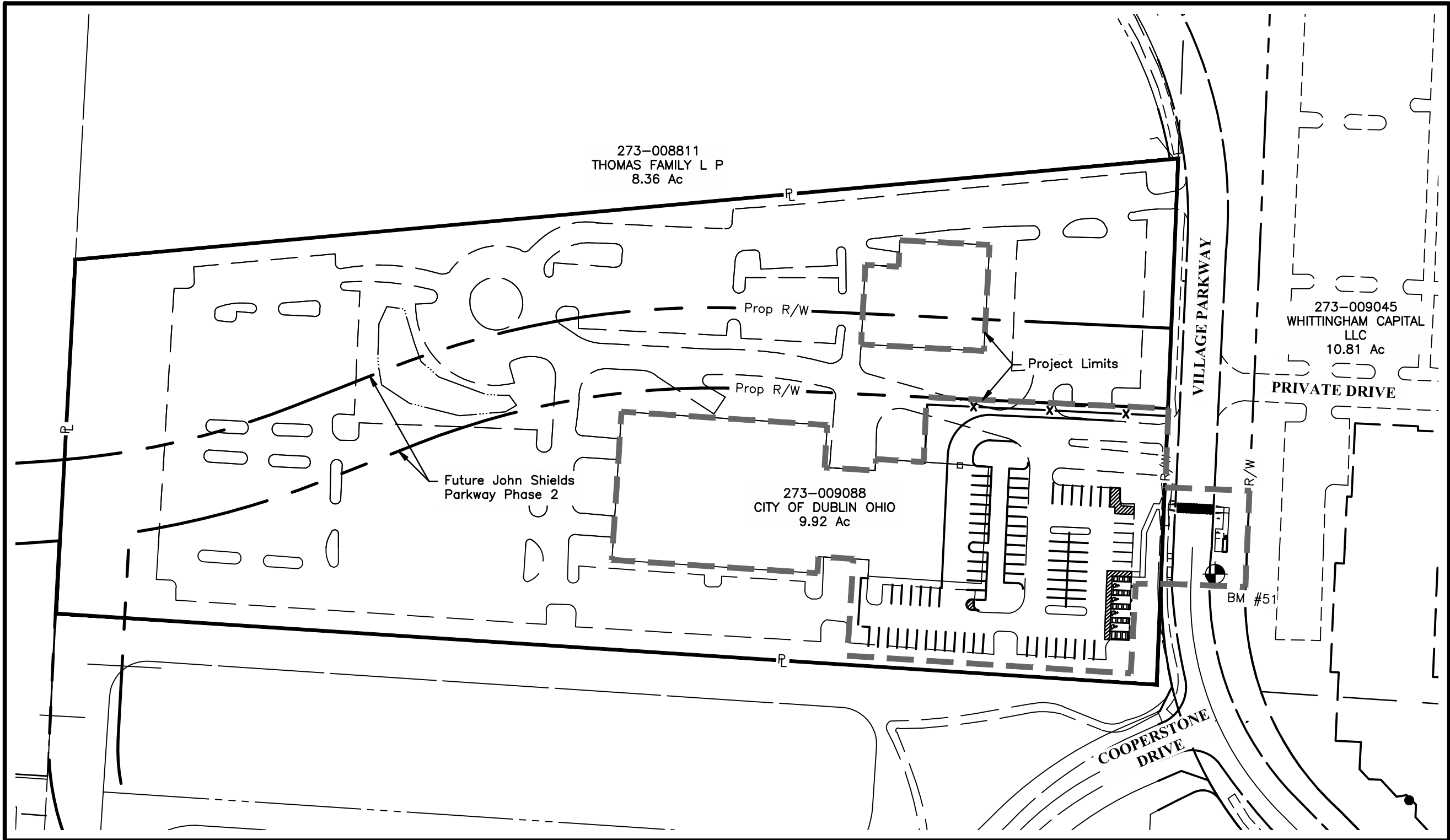
Send the information to the following address:
Construction Inspection Division
City of Columbus
1800 East 17th Avenue
Columbus, Ohio 43219

Send a copy of the transmittal letter to the following address:
Division of Engineering
City of Dublin
5800 Shier Rings Road
Dublin, Ohio 43016
- All trenches within public right-of-way shall be backfilled according to the approved construction drawings or securely plated during nonworking hours. Trenches outside these areas shall be backfilled or shall be protected by approved temporary fencing or barricades during nonworking hours. Clean-up shall follow closely behind the trenching operation.
- All trees within the construction area not specifically designated for removal shall be preserved, whether shown or not shown on the approved construction drawings. Trees to be preserved shall be protected with high visibility fencing placed a minimum 15 feet from the tree trunk. Trees 6 -inches or greater at DBH (Diameter Breast Height) must be protected with fencing placed at the critical root zone or 15 feet, whichever is greater. Trees not indicated on the approved construction drawings for removal may not be removed without prior approval of the Division of Engineering.
- Conduit must be directionally bored across streets instead of open cut, unless specifically approved by the City Engineer. Use of pneumatic air ram devices is not permitted. Permits to construct in the right-of-way of existing streets must be obtained from the City of Dublin Division of Engineering before commencing construction. Should open cutting of existing pavement be permitted, Controlled Density Backfill (Type III) shall be used in place of compacted granular backfill, according to Item 636 of the Standard Specifications.
- The Contractor shall be responsible for the condition of trenches within the right-of-way and public easements for a period of one year from the final acceptance of the work, and shall make any necessary repairs at no cost to the City.
- Pavements shall be cut in neat, straight lines the full depth of the existing pavement, or as required by the City Engineer. Pavement replacement shall be conducted according to City of Columbus Standard Drawing 1441 and applicable City of Dublin standard drawings. The replacement of driveways, handicapped ramps, sidewalks, bike paths, parking lot pavement, etc. shall be provided according to the approved construction drawings and City of Dublin standard construction drawings.
- Tree trimming within the construction zone is to be completed by a certified Arborist. At the completion of the project the Arborist is to return and trim any broken branches as needed.
- Any modification to the work shown on drawings must have prior written approval by the City Engineer, City of Dublin.
- All inlets shall be channelized.
- Park areas shall be fine-graded and seeded with the following mixture:
Improved Kentucky Bluegrass, 40% of weight (2 varieties in equal parts)
Improved Perennial Rye, 60% of weight (2 varieties in equal parts)
Germination Rate: 85%
Application Rate: 7 lbs per 1000 sq ft as directed by the Division of Parks & Recreation, City of Dublin, Ohio.
- Traffic control and other regulatory signs shall be Type S with a square post anchor base installation and meet all requirements of ODOT TC-41.20 and applicable City of Dublin specifications.
- Street signs shall meet all City of Dublin specifications with lettering colored in white displayed over a brown background. Sign tubing shall be brown in color and conform with the Type S, square post anchor base installation requirements of ODOT TC-41.20.

UTILITIES

1. The following utilities are known to be located within the limits of this project:
- | | | | |
|--|--|---|---|
| Columbia Gas of Ohio
Rob Caldwell – Field Engineer
1600 Dublin Road
Columbus, Ohio 43212 | City of Dublin
Division of Engineering
Ken Richardson, P.E.
5800 Shier Rings Road
Dublin, Ohio 43016
(614) 410-4631 | City of Columbus
Division of Power and Water (Water)
910 Dublin Road, 2nd Floor
Columbus, Ohio 43215
(614) 645-7677 | Verizon
Bill Muether
550 Leader Street
Marion, Ohio 43302
(740) 383-0527 |
| American Electric Power
Rob Sloneker
850 Tech Center Drive
Gahanna, Ohio 43230-6605
(614) 883-6829 | Time Warner Cable
Ray Maurer
3760 Interchange Road
Columbus, Ohio 43204
(614) 481-5262 | AT&T of Ohio
Tom Ziomek
111 North 4th Street
Columbus, OH 43215
(614)223-7162 | Wide Open West
Jaytee Novara
3675 Corporate Drive
Columbus, Ohio 43231
(614) 948-4653 |

CITY OF DUBLIN, FRANKLIN COUNTY, OHIO
PRIVATE SITE IMPROVEMENT PLAN
FOR
INTERIM COTA
PARK AND RIDE
2015



INDEX MAP

Scale: 1" = 100'

DEVELOPER/OWNER

City of Dublin
5800 Shier Rings Road
Dublin, Ohio 43016
Tel: (614) 410-4600
Fax: (614) 410-4747

ENGINEER

EMH&T Inc.
5500 New Albany Road
Columbus, Ohio 43054
Tel: (614) 775-4500
Fax: (614) 775-4800

BENCH MARKS

(NAVD 1988)

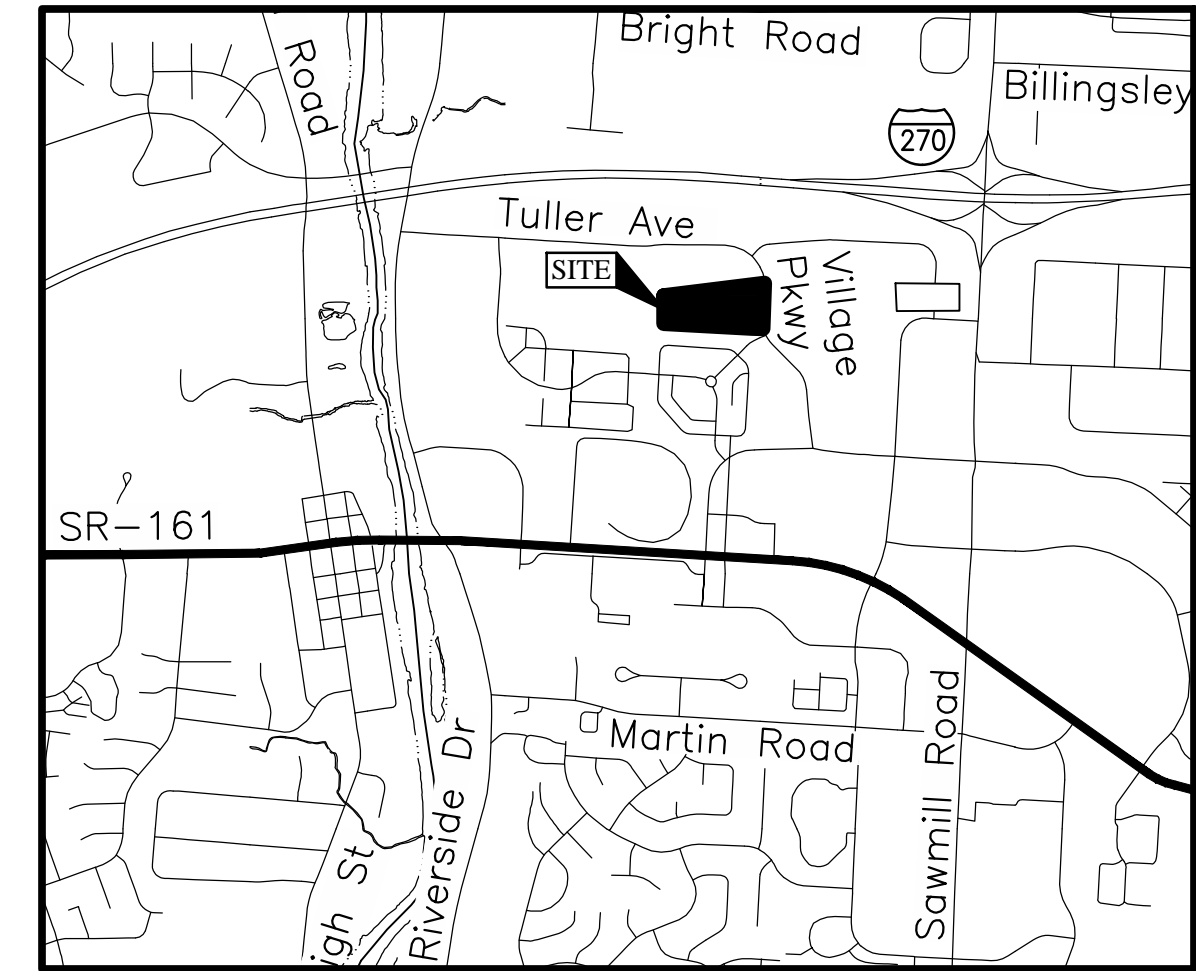
BM#51 Chiseled "X" on the west flange bolt of a fire hydrant located on the east side of Village Parkway, 270 feet north of the intersection of Village Parkway and Cooperstone Drive.

Elev. = 890.10

STANDARD CONSTRUCTION DRAWINGS

The Standard Construction Drawings listed on these plans are to be considered a part thereof.

City of Dublin	City of Columbus
PD-02	AA-S104
PD-03	AA-S133A
PD-06	AA-S149
	AA-S151
RD-05	
ST-03	1441
SL-02	
SL-04	
SL-05	
SL-13	



LOCATION MAP

Not to Scale

CITY OF DUBLIN APPROVAL

The signatures below signify only concurrence with the general purpose and general location of the project and does not constitute assistance to operate as intended. All technical details remain the responsibility of the Engineer preparing the plans.

City Engineer, City of Dublin, Ohio
Paul A. Hammersmith, P.E.

Date

Director of Land Use & Long Range Planning, City of Dublin, Ohio

Date

SHEET LIST TABLE

Title Sheet	1
General Notes and Details	2
Demolition Plan	3
Site Plan	4
Grading Details	5
Street Sign Plan	6
Site Lighting Notes	7
Site Lighting Plan	8
Site Photometrics	9
Sediment and Erosion Control Details	10

SITE DATA

Ex. Site Area:	±9.92 Acres
Disturbed Area:	±1.54 Acres
Proposed COTA Park and Ride Parking Stalls	85 Spaces

PROJECT DESCRIPTION

This is a proposal for an interim COTA Park and Ride parking lot using as existing parking lot, located to the west of Village Parkway and to the North of Cooperstone Drive.

PREPARED BY:

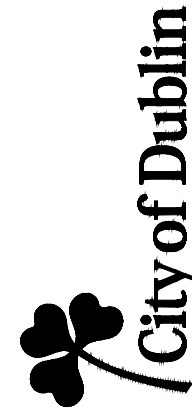


Registered Engineer No.

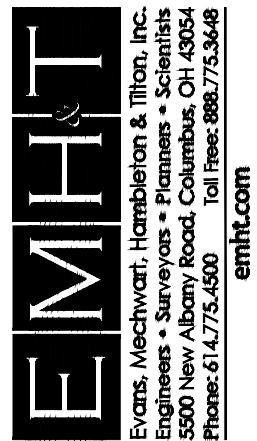
Date

REVISIONS

MARK	DATE	DESCRIPTION



CITY OF DUBLIN, FRANKLIN COUNTY, OHIO
PRIVATE SITE IMPROVEMENT PLAN
FOR
INTERIM COTA PARK AND RIDE
TITLE SHEET



DATE

July 24, 2015

SCALE

As Noted

JOB NO.

2014-0588

SHEET

1/10

U:\2014\0568\Draw\04Sheets\Temporary_Site\Phase 2\2 General Notes and Details.dwg Last Saved By: awolf, 7/24/2015 8:51 AM Last Printed By: Pelletier, James, 7/24/2015 1:47 PM (No Xrefs)

2. The Contractor shall give notice of intent to construct to Ohio Utilities Protection Service (telephone number 800-362-2764), Producer's Underground Protection Service (telephone number 614-587-0486), and to owners of underground utilities that are not members of a registered underground protection service. Notice shall be given at least 2 working days before start of construction.
3. The identity and locations of existing underground utilities in the construction area have been shown on the approved construction drawings as accurately as provided by the owner of the underground utility. The City of Dublin and the City Engineer assumes no responsibility for the accuracy or depths of underground facilities shown on the approved construction drawings. If damage is caused, the Contractor shall be responsible for repair of the same and for any resulting contingent damage.
4. Location, support, protection and restoration of all existing utilities and appurtenances, whether shown or not shown on the approved construction drawings, shall be the responsibility of the Contractor.
5. When unknown or incorrectly located underground utilities are encountered during construction, the Contractor shall immediately notify the owner and the City Engineer.
6. Public street lighting may be in the vicinity of this project. Contact the City of Dublin, Division of Engineering at 410-4637, two days prior to beginning work.

TRAFFIC CONTROL

1. Traffic control shall be furnished, erected, maintained, and removed by the Contractor according to Ohio Manual of Uniform Traffic Control Devices (OMUTCD), current edition.
2. All traffic lanes of public roadways shall be fully open to traffic from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM unless authorized differently by the City Engineer. At all other hours the Contractor shall maintain minimum one-lane two-way traffic. Uniformed, off-duty police officers shall replace flagmen designated by the OMUTCD, and shall be present whenever one-lane, two-way traffic control is in effect. Police cruisers may be required as directed by the City Engineer.
3. If the City Engineer determines proper provisions for traffic control are not being provided by the Contractor, the City Engineer shall assign uniformed, off-duty police officers to the project at no cost to the City.
4. Steady-burning, Type "C" lights shall be required on all barricades, drums, and similar traffic control devices in use at night.
5. Access from public roadways to all adjoining properties for existing residents or businesses shall be maintained throughout the duration of the project for mail, public water and sanitary sewer service, and emergency vehicles. The Contractor shall provide a traffic control plan detailing the proposed maintenance of traffic procedures. The traffic control plan must incorporate any traffic control details contained herein. The traffic control plan proposed by the Contractor must be approved by the City Engineer prior to construction.

EROSION AND SEDIMENT CONTROL

1. The City is responsible for submitting a Notice of Intent (NOI) to be reviewed and approved by the Ohio EPA. The NOI must be submitted to OEPA 45 days prior to the start of construction and may entitle coverage under the Ohio EPA General Permit for Stormwater Discharges associated with construction activity. A project location map must be submitted with the NOI. A sediment and erosion control plan must be submitted to the City Engineer for approval if a sediment and erosion control plan has not already been included with the approved construction drawings. This plan must be made available at the project site at all times. The design of erosion control systems shall follow the requirements of Ohio EPA, Item 207 of Ohio Department of Transportation Standard Specifications, and the City Engineer. An individual NPDES Stormwater Discharge Permit may be required. The Contractor shall be considered the permittee.
2. The Contractor shall provide sediment control at all points where storm water runoff leaves the project, including waterways, overland sheet flow, and storm sewers.
3. Accepted methods of providing erosion/sediment control include but are not limited to: sediment basins, silt filter fence, aggregate check dams, and temporary ground cover. Hay or straw bales are not permitted.
4. The Contractor shall provide adequate drainage of the work area at all times consistent with erosion control practices.
5. Disturbed areas that will remain unworked for 21 days or more shall be seeded or protected within seven calendar days of the disturbance. Other sediment controls that are installed shall be maintained until vegetative growth has been established. The Contractor shall be responsible for the removal of all temporary sediment devices at the conclusion of construction but not before growth of permanent ground cover.

STORM SEWERS

1. All storm water detention and retention areas and major flood routing swales shall be constructed to finish grade and hydro-seeded and hydro-mulched according to Items 203 and 659 of the Standard Specifications.
2. Where private storm sewers connect to public storm sewers, the last run of private storm sewer connecting to the public storm sewer shall be reinforced concrete pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings. Inspection is required by the City of Dublin's Division of Engineering.
3. Granular backfill shall be compacted granular material according to Item 912 of the Standard Specifications or Controlled Density Backfill according to Item 636, Type III of the Standard Specifications as directed by the City Engineer.
4. All storm sewers shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.
5. All 8 inch storm sewers shall be Ductile Iron Pipe conforming to the material specification of AWWA C151, Joint Specification of AWWA C111, and Bedding Classification of ASTM C-12. All Ductile Iron Pipe shall be concrete encasing per City of Columbus Standard Drawing AA-S148.
6. Headwalls and endwalls shall be required at all storm sewer inlets or outlets to and from stormwater management facilities. Natural stone and/or brick approved by the City Engineer shall be provided on all visible headwalls and/or endwalls surfaces. Surfaces to be acid washed before approval of stone facing.
7. Storm inlets or catch basins shall be channelized and have bicycle safe grates.
8. Storm sewer outlets greater than 18 inches in diameter accessible from stormwater management facilities or watercourses shall be provided with safety grates, as approved by the City Engineer.

MAIL DELIVERY

1. The Contractor shall be responsible to ensure that U.S. Mail delivery within the project limits is not disrupted by construction operations. This responsibility is limited to relocation of mailboxes to a temporary location that will allow the completion of the work and shall also include the restoration of mailboxes to their original location or approved new location. Any relocation of mailbox services must be first coordinated with the US Postal Service and the homeowner.
2. Before relocating any mailboxes, the Contractor shall contact the U.S. Postal Service and relocate mailboxes according to the requirements of the Postal Service.

USE OF FIRE HYDRANTS

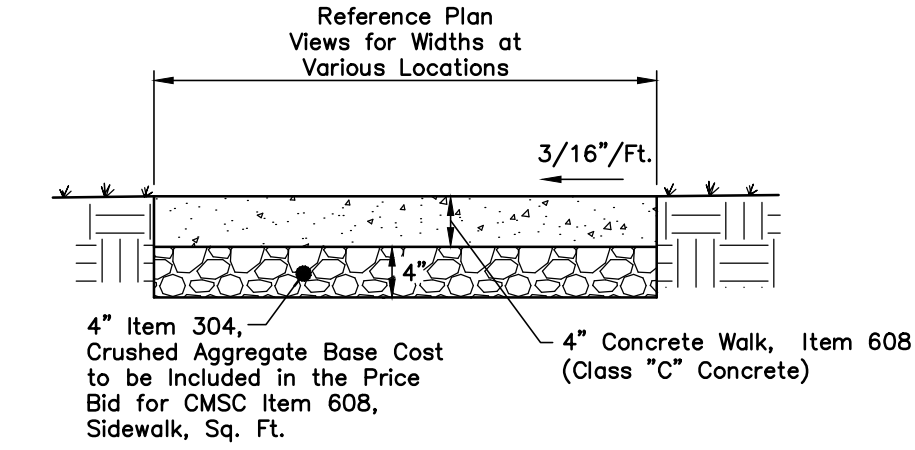
1. The Contractor shall make proper arrangements with the Dublin Service Department and the Columbus Division of Power and Water for the use of fire hydrants when used for work performed under this contract and provide the city of Dublin a copy of the Hydrant Usage Permit obtained from the City of Columbus. The Contractor shall also send copies of permits obtained from Dublin and Columbus to the Washington and/or Perry Township Fire Department. Permits shall be kept at the construction site at all times.
2. Before the final estimate is paid, the Contractor shall submit a letter from the City of Columbus Division of Power and Water (Water) to the City Engineer stating that the Contractor has returned the Siamese Valve to the City of Columbus and has paid all costs arising from the use of the fire hydrants.

MISCELLANEOUS - DEVELOPER NOTES

1. High Density Polyethylene (HDPE) corrugated pipe with integrally formed smooth interior wall, ADS N-12 or approved equal, is an approved alternate to reinforced concrete pipe in paved and non-paved areas.
2. HDPE pipe joints shall be made using watertight couplers with "O"-ring gasket, ADS WT of approved equal, where rubber "O"-ring gasket (ASTM C-361) pipe is required on approved constructions plans or within contract documents. All other pipe shall have a bell and spigot joint with rubber gasket meeting ASTM F477.
3. All bedding material shall be in accordance with City of Columbus Standard Construction Drawing AA-S149.
4. Backfill material shall be placed in accordance with Item 911 of the City of Columbus Construction Material Specifications (CMS).
5. Backfill material in areas located outside the public right-of-way shall be placed in accordance with City of Columbus Standard Construction Drawing AA-S155.
6. Height of cover shall be in accordance with the Ohio Department of Transportation (ODOT) Location and Design (L&D) Manual, Volume Two, Section 1008.3.1.
7. All HDPE pipe shall be mandrel tested in accordance with City of Columbus Item 901.21, with the exception that the waiting period prior to testing shall be 30 days.
8. For any and all installations requiring the minimization of trench water migration, anti-seep collars shall be installed in accordance with the ODOT L&D Manual, Volume Two Section 1118.4.1.2 and ODOT Standard Hydraulic Construction Drawing WQ-1.2.

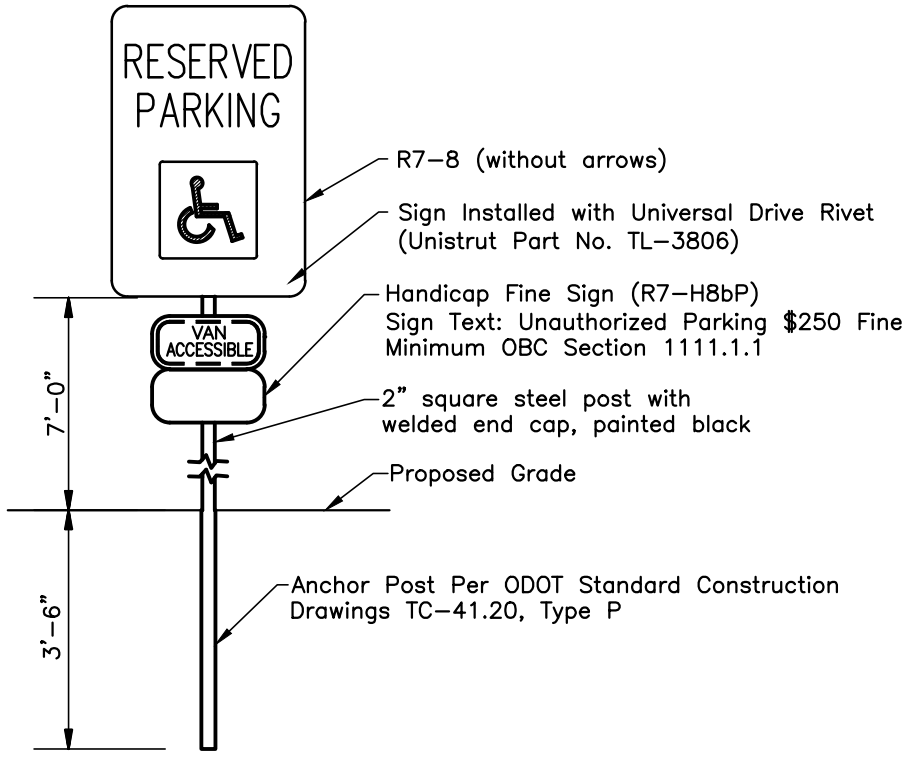
AS-BUILTS

1. As-builts of the site, utilities and stormwater management facilities shall be performed per requirements of the City of Dublin Administrative Policy & Procedure #08-030 prior to obtaining occupancy for the building.



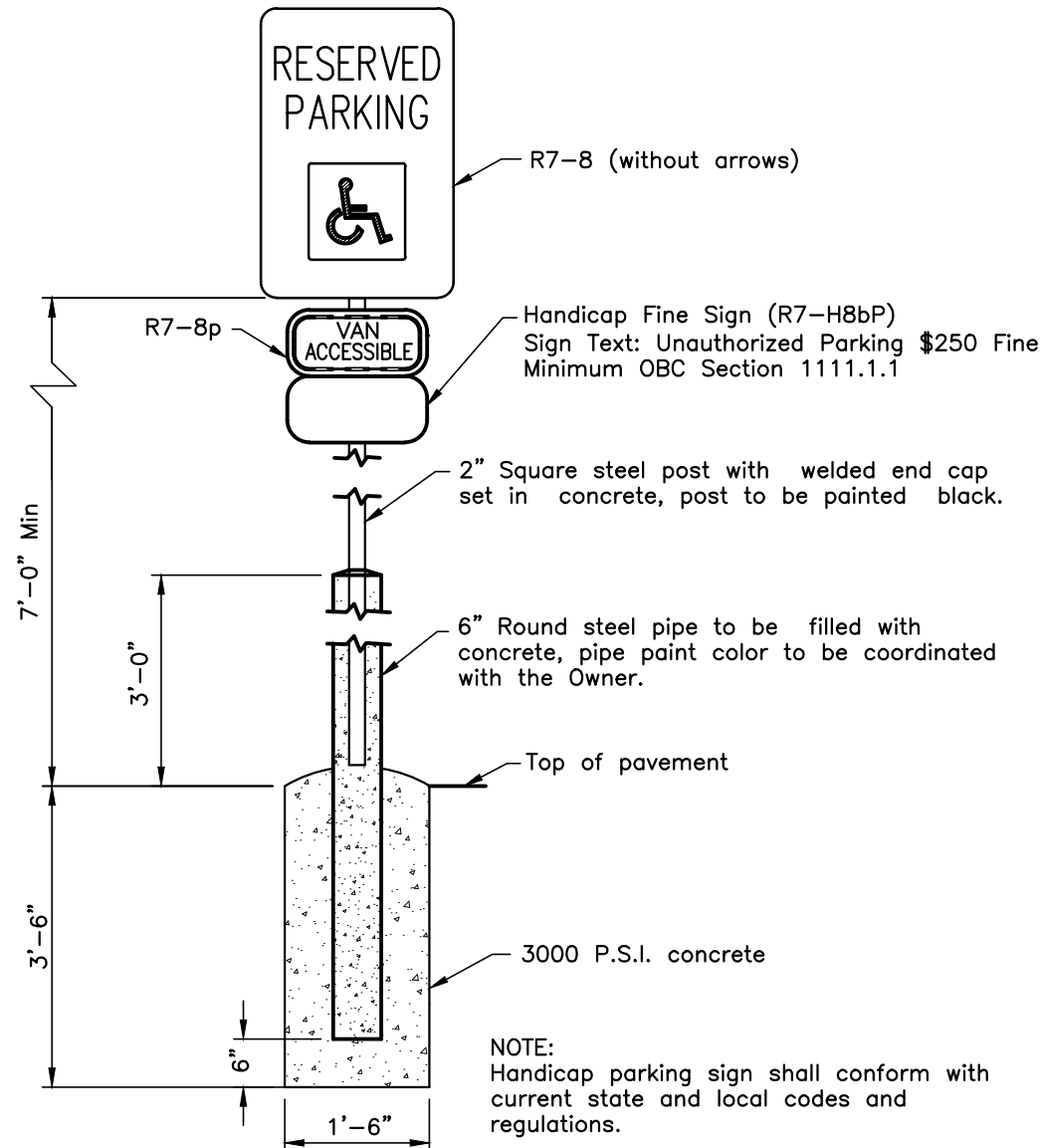
TYPICAL SIDEWALK SECTION

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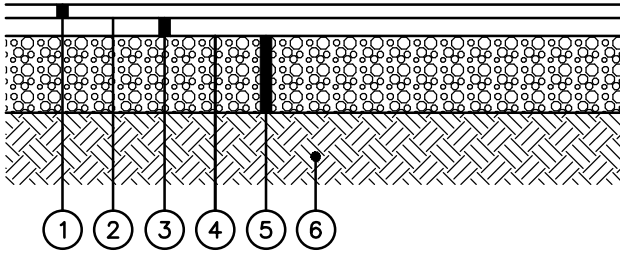
TYPICAL HANDICAP SIGN DETAIL (IN GRASS)

Not To Scale



TYPICAL HANDICAP SIGN DETAIL (IN PAVEMENT)

Not To Scale



TYPICAL SECTION

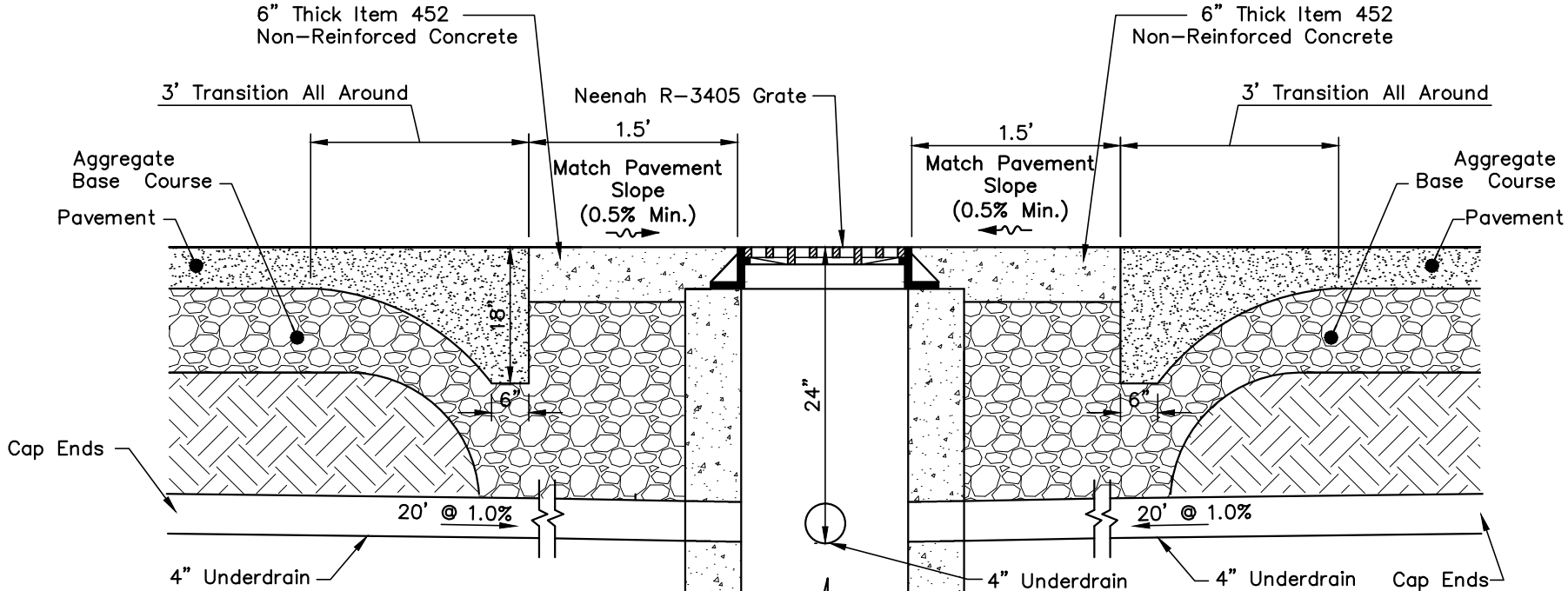
- 1 Item 448, 1 1/2" Asphalt Concrete Surface Course
2 Item 407, NTSS-1HM Trackless Tack Coat (0.06 Gal/Sq. Yd)
3 Item 448, 1 1/2" Asphalt Concrete Intermediate Course
4 Item 407, NTSS-1HM Trackless Tack Coat (0.08 Gal/Sq. Yd)
5 Item 304, 8" Crushed Aggregate Base
6 Item 203, Subgrade Compaction

PAVEMENT SECTION

Not To Scale

NOTE:

Pavement Section per George Byers + Sons Holiday Chevrolet at Dublin Village Center Final Development Plan, dated April 1989

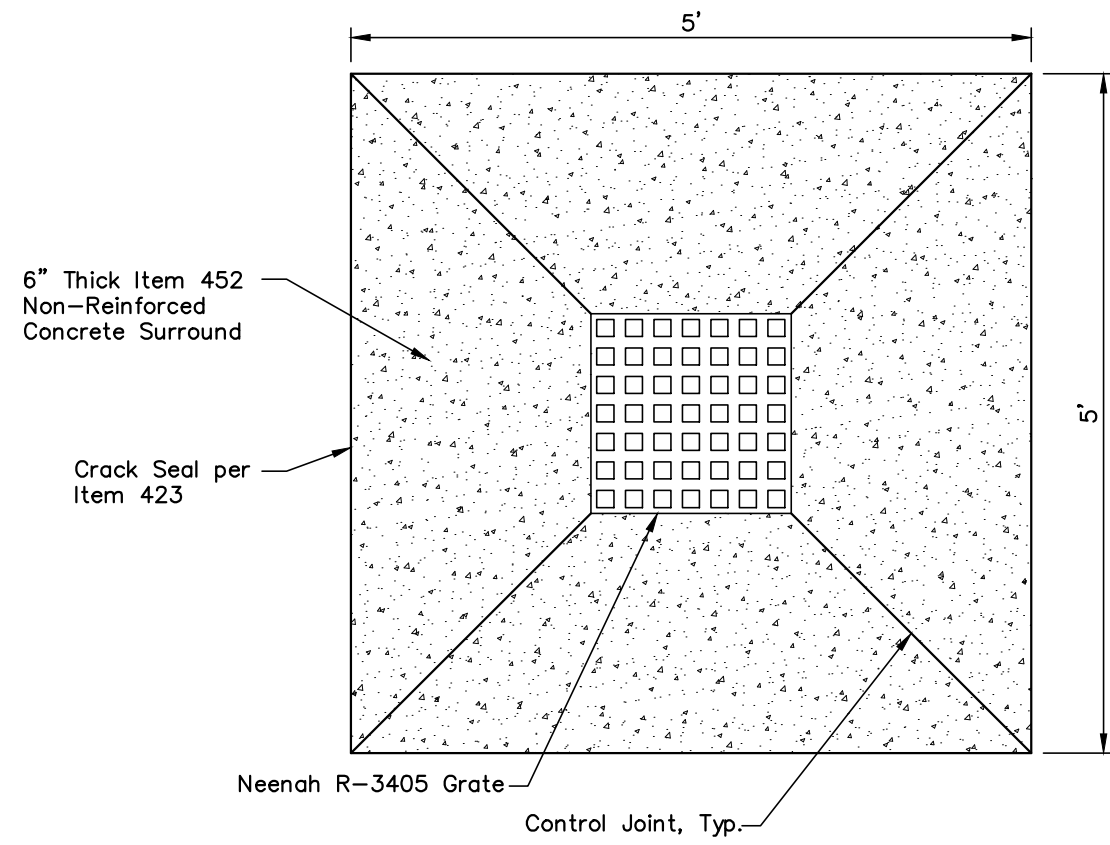
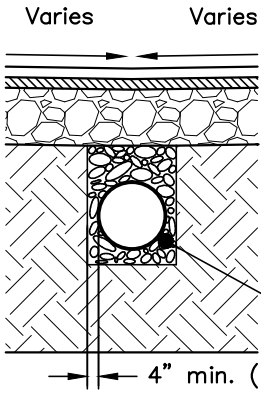


SECTION

The 4" Perforated Underdrain shall be provided for each structure in all four directions unless otherwise directed.

The Perforated Pipe shall be protected from heavy traffic after installation prior to placement of proposed pavement.

The Contractor shall initially set the top of casting for an inlet structure within the paved areas to the elevation of the intermediate pavement course. Prior to final paving of surface course, the Contractor shall adjust the top of casting to finish pavement grade. cost of the above shall be included in the price bid for the various related sewer items.



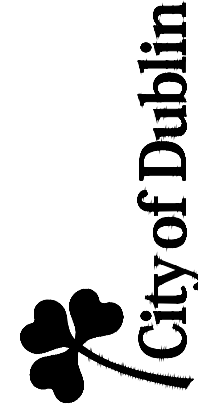
CONCRETE SURROUND WITH ASPHALT TURNDOWN FOR STRUCTURES WITHIN PAVEMENT

BID SET
NOT TO BE USED FOR CONSTRUCTION

PLAN SET DATE
July 24, 2015

REVISIONS

MARK	DATE	DESCRIPTION



CITY OF DUBLIN, FRANKLIN COUNTY, OHIO
PRIVATE SITE IMPROVEMENT PLAN
FOR
INTERIM COTA PARK AND RIDE
GENERAL NOTES AND DETAILS



DATE

JULY 24, 2015

SCALE

Not To Scale

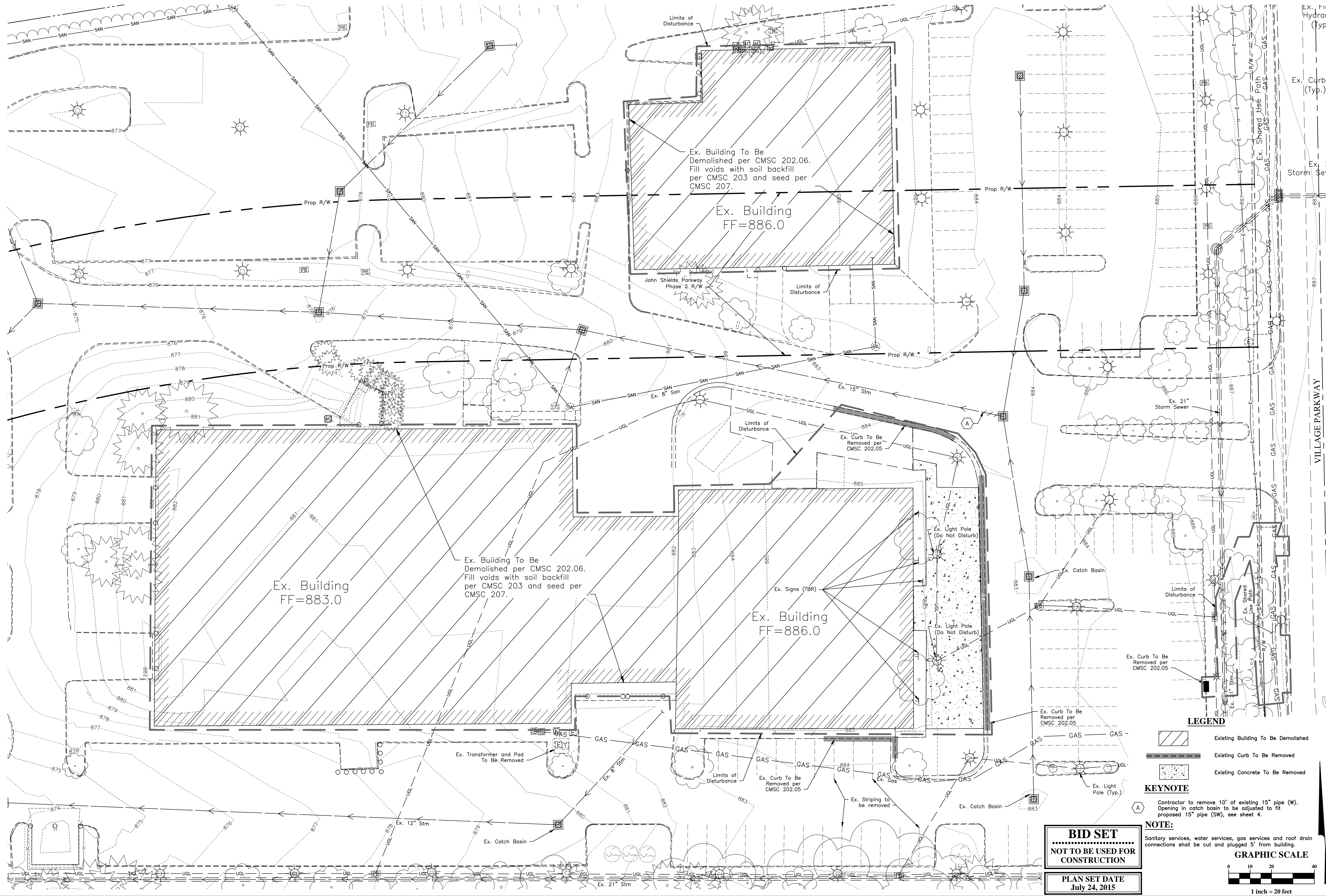
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2014-0588

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BID SET
.....
NOT TO BE USED FOR CONSTRUCTION
PLAN SET DATE
July 24, 2015

LEGEND

- Existing Building To Be Demolished
- Existing Curb To Be Removed
- Existing Concrete To Be Removed

KEYNOTE

A Contractor to remove 10' of existing 15" pipe (W). Opening in catch basin to be adjusted to fit proposed 15" pipe (SW), see sheet 4.

NOTE:
Sanitary services, water services, gas services and roof drain connections shall be cut and plugged 5' from building.

GRAPHIC SCALE

0 10 20 40
1 inch = 20 feet

REVISIONS	
MARK	DATE DESCRIPTION

City of Dublin

CITY OF DUBLIN, FRANKLIN COUNTY, OHIO
PRIVATE SITE IMPROVEMENT PLAN
FOR
INTERIM COTA PARK AND RIDE
DEMOLITION PLAN

EMHIT
Evans, Mechwart, Henderson & Thon, Inc.
5900 New Albany Road, Columbus, OH 43254
Phone: 614.775.4500 Toll Free: 888.775.3448
emhit.com

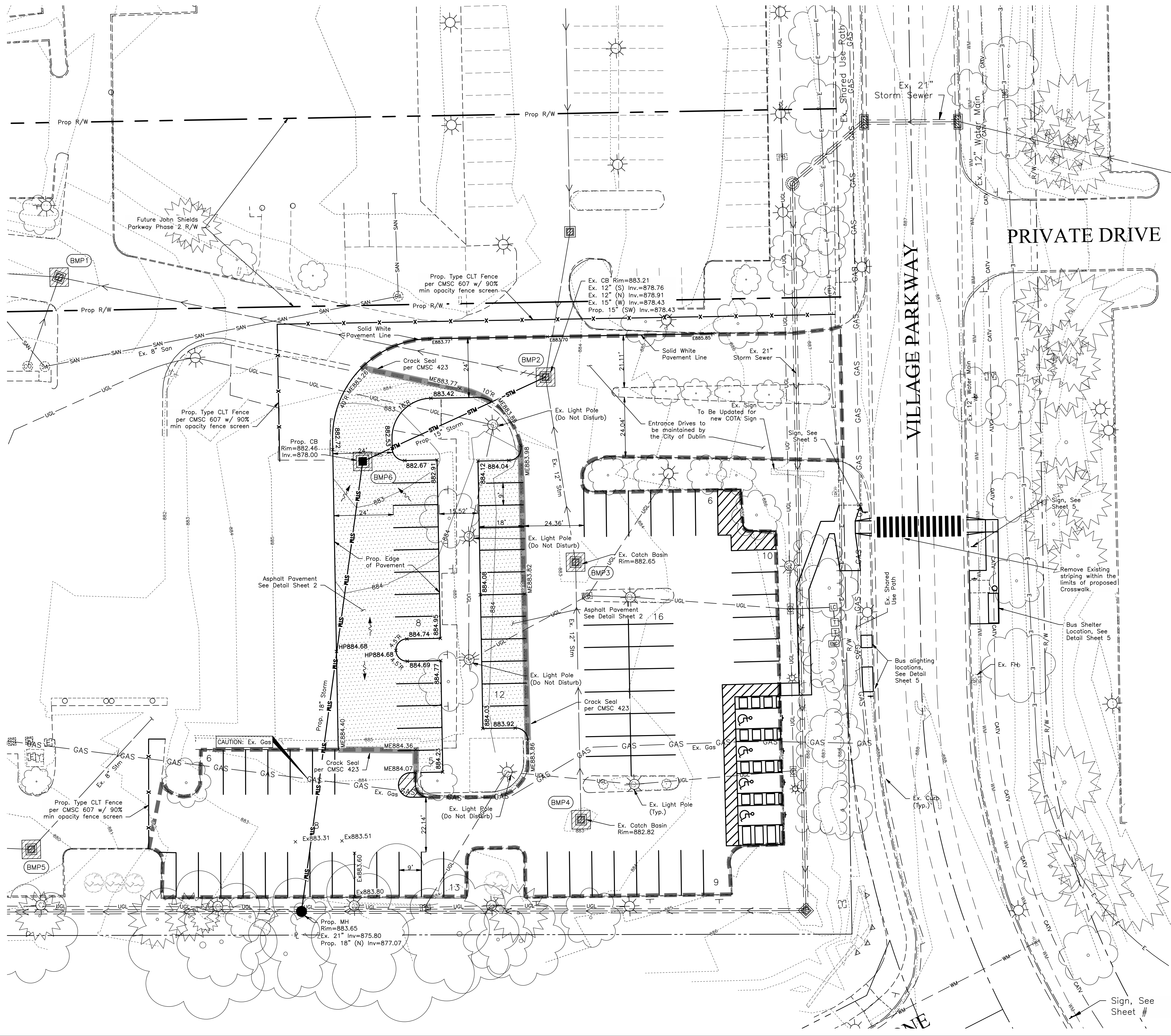
DATE
July 24, 2015

SCALE
As Noted

JOB NO.
2014-0588

SHEET
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LEGEND

- Asphalt Pavement
- Crack Seal per CMSC 423
- Asphalt area to be sealcoated and restriped per CMSC 641
- Inlet Protection

GRAPHIC SCALE

1 inch = 20 feet

NOTE:

All curb radii are 5' unless otherwise noted.

All spot elevations are to top of pavement/walk unless otherwise specified.

Deteriorated and failing asphalt shall be marked in the field and repaired.

SITE DATA TABLE

Phase 2 Parking Lot	85 Spaces
---------------------	-----------

BID SET

NOT TO BE USED FOR CONSTRUCTION

PLAN SET DATE

July 24, 2015

REVISIONS	MARK	DATE	DESCRIPTION

City of Dublin

CITY OF DUBLIN, FRANKLIN COUNTY, OHIO
PRIVATE SITE IMPROVEMENT PLAN
FOR
INTERIM COTA PARK AND RIDE
SITE PLAN

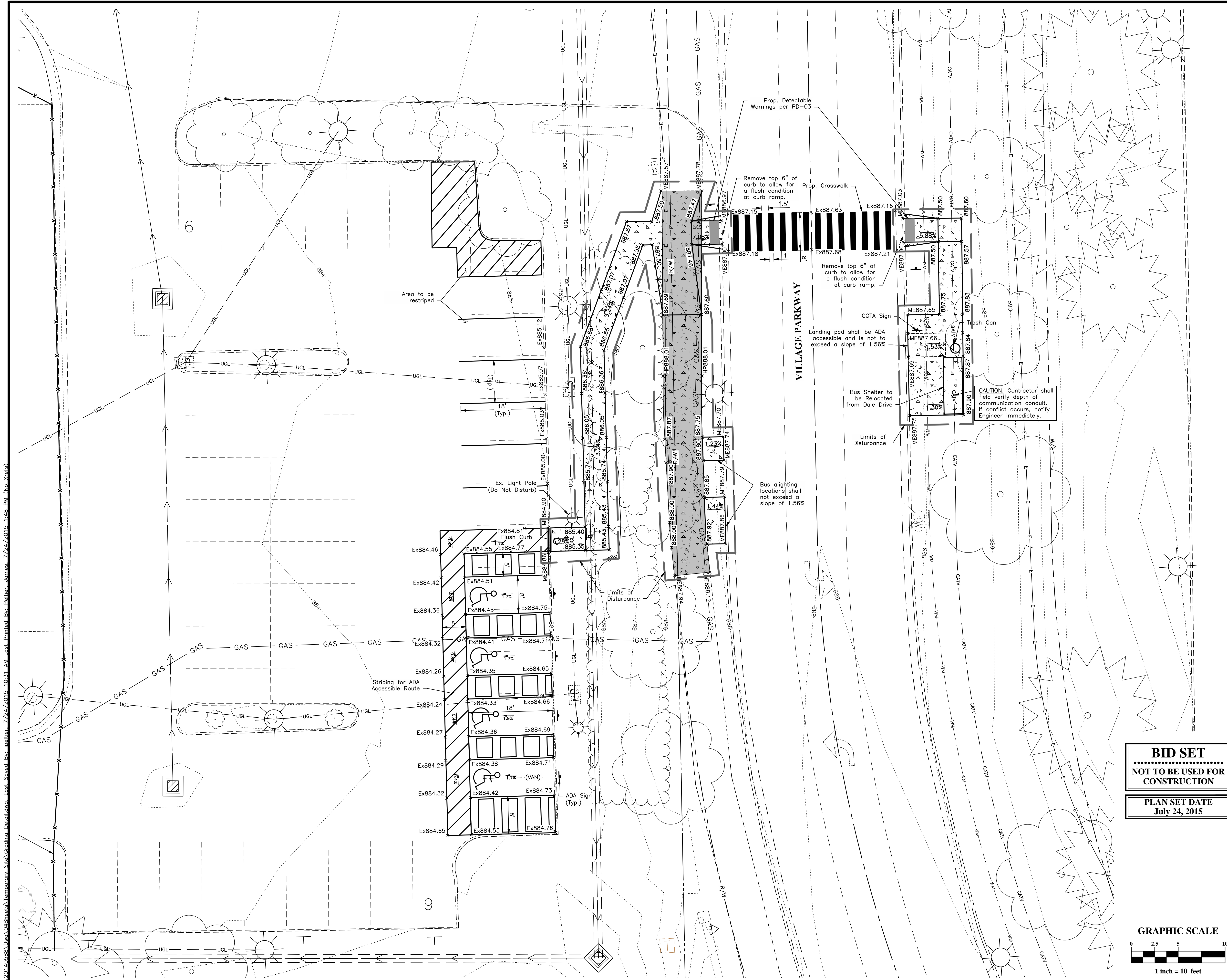
EMHIT
Evans, Mechwart, Hamblen & Thon, Inc.
5900 New Albany Road, Columbus, OH 43254
Phone: 614.775.4500 Toll Free: 888.775.3448 emhit.com

DATE
July 24, 2015

SCALE
As Noted

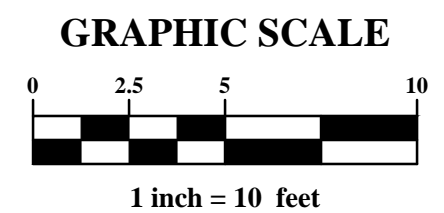
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4/10



BID SET
.....
NOT TO BE USED FOR CONSTRUCTION

PLAN SET DATE
July 24, 2015



- LEGEND**
- Concrete Walk
 - ADA Accessible Path
 - Existing asphalt shared use path to be removed
 - Match Existing

NOTES:

Where pavement or sidewalk is removed and no new work is to be completed, the void shall be backfilled and seeded per Note 26 on Sheet 1.

All elevations are to top of pavement/walk unless otherwise specified.

REVISIONS	
MARK	DATE

City of Dublin

CITY OF DUBLIN, FRANKLIN COUNTY, OHIO
PRIVATE SITE IMPROVEMENT PLAN
FOR
INTERIM COTA PARK AND RIDE
GRADING DETAILS

EMHT
Evans, Mechwart, Hamilton & Thon, Inc.
5900 New Albany Road, Columbus, OH 43254
Phone: 614.775.6500 Toll Free: 888.775.3448
emht.com

DATE
JULY 24, 2015

SCALE
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SHEET
5/10

THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING A SOLAR POWERED PEDESTRIAN CROSSING WARNING SIGN SYSTEM. THE "SYSTEM" SHALL BE CONSIDERED ONE PAIR OF WARNING SIGN ASSEMBLIES (ONE ASSEMBLY FOR EACH DIRECTION OF VILLAGE PARKWAY). THE SIGNS SHALL INCLUDE FLASHING LEDS ALONG THE SIGN BORDER (BLINKERSIGN BY TAPCO). BE SOLAR POWERED, AND PEDESTRIAN ACTIVATED VIA MICROWAVE DETECTORS AND ADA-COMPLIANT PUSHBUTTONS. THE SYSTEM SHALL BE WIRELESSLY CONTROLLED AND SYNCHRONIZED VIA THE BLINKERBEAM SYSTEM BY TAPCO. EACH SYSTEM COMPONENT SHALL BE COMPLIANT WITH THE MOST CURRENT OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD). SEE DETAIL ON THIS SHEET FOR ADDITIONAL REQUIREMENTS.

EACH ASSEMBLY SHALL INCLUDE A 30-INCH PEDESTRIAN WARNING SIGN (W11-2) WITH FLASHING YELLOW LEDs ALONG THE SIGN BORDER.

EACH ASSEMBLY SHALL UTILIZE SOLAR POWER.

THE UNIT SHALL BE CAPABLE OF RUNNING UP TO 30 DAYS WITHOUT SUNLIGHT.

FURNISH A COMPLETE ASSEMBLY, CONSISTING OF BUT NOT LIMITED TO, SIGNS, SIGN MOUNTING HARDWARE, DETECTORS, SOLAR PANEL, POLE, FOUNDATION, AND ELECTRICAL COMPONENTS (WIRING, SOLID-STATE

A. THE PUSHBUTTON SHALL BE A POLARA BULLDOG MODEL NO. BDL3-Y WITH POLARA BULLDOG MOUNTING, MODEL NO. APBC-Y.

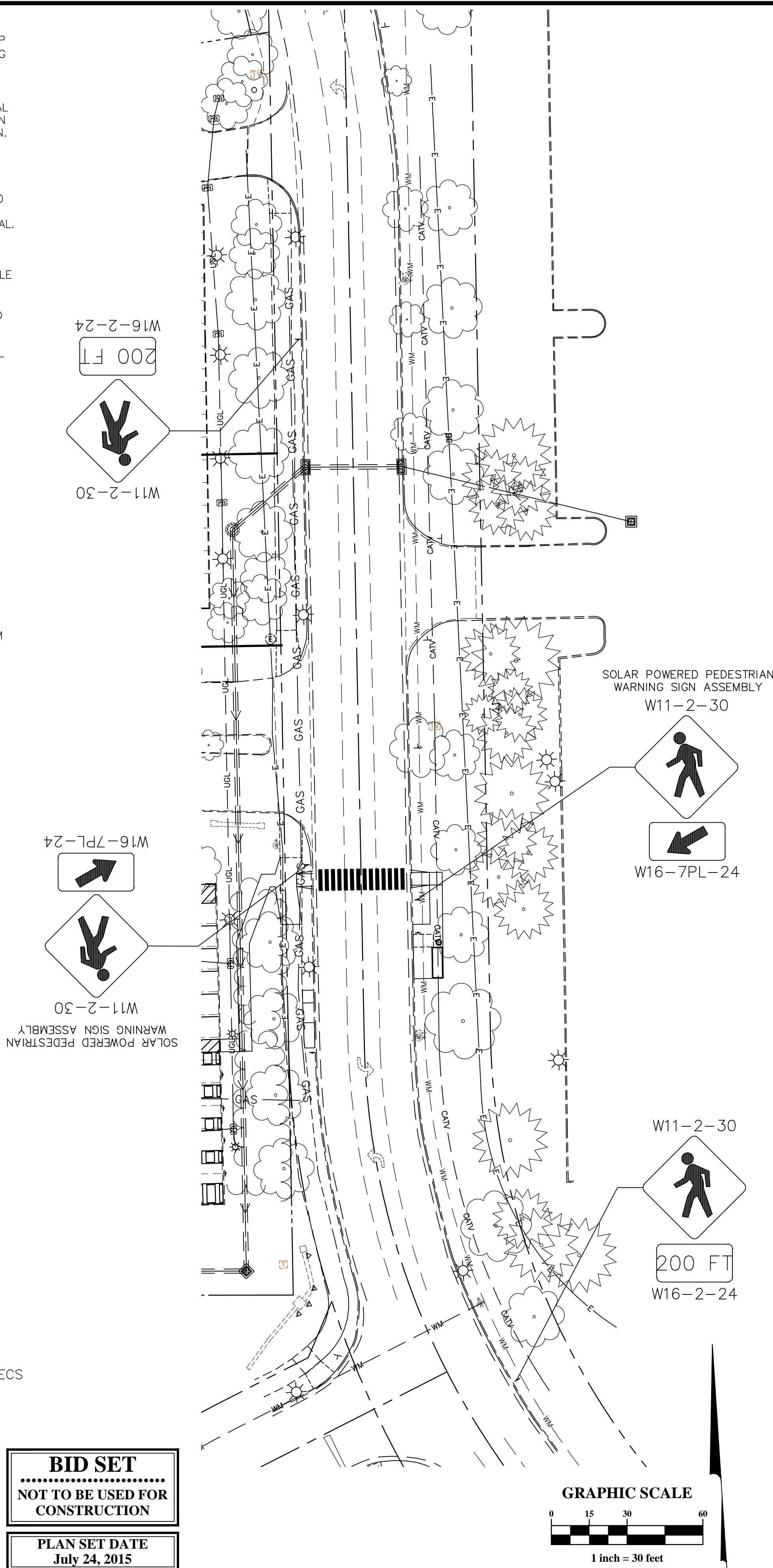
B. A CLEAR BEAD OF SILICONE SEALANT SHALL BE APPLIED TO THE



PAYMENT WILL BE AT THE CONTRACT LUMP SUM PRICE BID FOR ITEM 630 "SIGNING, MISC.: PEDESTRIAN CROSSING WARNING SYSTEM".



BID SET
.....
**NOT TO BE USED FOR
CONSTRUCTION**

PLAN SET DATE
July 24, 2015



 <p>EMHT Evans, Mechwart, Hombell & Tillen, Inc. 5200 New Albany Road, Columbus, OH 43254 Phone: 614.775.4500 Fax: 614.775.3448 www.emht.com</p>	CITY OF DUBLIN, FRANKLIN COUNTY, OHIO PRIVATE SITE IMPROVEMENT PLAN FOR INTERIM COTA PARK AND RIDE STREET SIGN PLAN			DATE JULY 24, 2015		SCALE As Noted	JOB NO. 2014-0588	SHEET 6/10	REVISIONS
	MARK	DATE		DESCRIPTION					
				</					

SITE LIGHTING NOTES

PLAN AND SPECIFICATION COMPLIANCE

These specifications, together with the accompanying plans, are to describe the type, size, and location of the products and material to be provided and installed under various bid items related to Street Lighting. The Contractor shall furnish and install Street Lighting items and related material in compliance with these plans and specifications, as well as the current Ohio Department of Transportation Construction and Material Specifications, and the City of Dublin Standard Detail drawings for Street Lighting. Street Lighting plans shall meet or exceed the standards specified. In case of a conflicting specification statement, the specification document hierarchy shall be in the order listed from (A) highest to (C) lowest.

- (A) Specifications listed in this plan
- (B) City of Dublin Street Lighting Standard Drawings and Specifications
- (C) ODOT Construction and Material Specificaitons

ITEM 625 – POWER SERVICE, AS PER PLAN

Power Service for parking lot lighting shall be as per Item 625, the power service schematic diagram shown on this sheet, and the City of Dublin Standard Drawing SL-13.

Provide an Arc Flash Hazard Warning sign on the outside front door of the enclosure in accordance with the current National Electrical Code paragraph 110.16.

Provide an Available Fault Current sign on the outside of the front door of the service disconnect enclosure in accordance with the current National Electrical Code paragraph 110.24.

Payment shall be as per Item 625.

GROUNDING AND BONDING

The requirements of the State of Ohio Department of Transportation Construction and Material Specifications (C&MS) and the HL series of Standard Construction Drawings are modified as follows:

- All metallic parts containing electrical conductors shall be permanently joined to form an Effective Ground Fault Current Path back to the grounded conductor in the power service disconnect switch.
 - Provide an equipment grounding conductor in metallic conduits (725.04) in addition to the conductors specified and bond the conduit to this grounding conductor.
 - When an equipment grounding conductor is required in plastic conduit (725.05), the installation shall include a separate equipment grounding conductor in addition to the conductors specified.
 - Metal pull box lids shall be bonded by attachment of the equipment grounding conductor to the frame diagonal as provided on HL-30.11.
- Conduits
 - The 725.04 conduit shall have grounding bushings installed at all termination points. The bushing material shall be compatible with galvanized steel conduit and the grounding lug material shall be compatible for use with copper wire. Threaded or compression type bushings may be used.
 - The 725.05 conduit shall have the inside and outside diameters of the conduit deburred at all termination points.
 - Both ends of metallic conduit shall be bonded to the equipment grounding conductor.
 - Metallic conduit may be bonded to metallic boxes through the use of conduit fittings UL approved for this type of connection, with the box bonded to the equipment grounding conductor.
- Wire for Grounding and Bonding
 - Use insulated, copper wire for the equipment grounding conductor. Bonding jumpers in boxes and enclosures may be bare or insulated copper wire. Wire size shall be as follows: The insulation shall be green or green with yellow stripe(s). For 4 AWG or larger, insulation may also be black with green tape/labels installed at all access points.
 - In a highway lighting system, the equipment grounding conductor shall be the same wire size as the duct cable or distribution cable circuit conductors, with the minimum conductor size of 4 AWG. Bonding jumpers will be minimum size 4 AWG.
- Ground Rod
 - A 3/4 inch Schedule 40 PVC conduit will be used in foundations and concrete walls for the grounding conductor (ground wire) raceway to the ground rod. Should metallic conduit be used, both ends of the conduit shall be bonded to the grounding conductor.
 - The typical grounding conductor (ground wire) shall be 4 AWG insulated, copper.
- Power Service and Disconnect Switch
 - At the power service location, the grounding conductor (ground wire) from the disconnect switch neutral (AC-) bar to the ground rod shall be a continuous, unspliced conductor. If spliced, it shall be an exothermic weld butt splice.
 - The service neutral shall only be connected to ground at the primary power service disconnect switch.

ITEM 625, NO. 4 AWG, 600 VOLT DISTRIBUTION CABLE

ITEM 625, NO. 10 AWG, 600 VOLT DISTRIBUTION CABLE

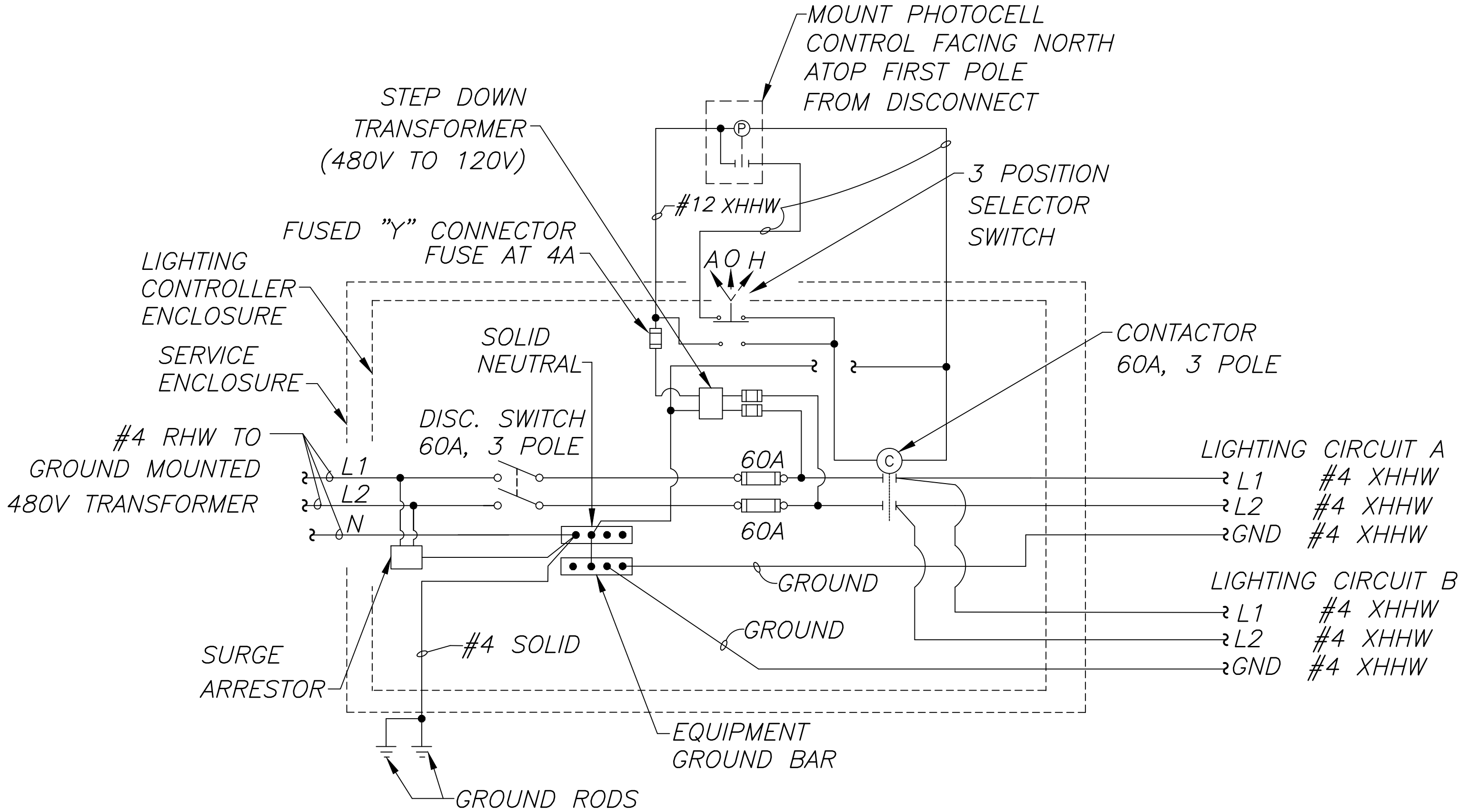
The Contractor shall furnish and install No. 4 AWG cable per Item 625 for use with lighting circuitry only. The Contractor shall furnish and install No. 10 AWG cable per Item 625 for use with security camera power only. All cables shall be insulated for wet locations, and 600 volts minimum. No other cables shall be permitted.

Payment shall be as per Item 625 per length of foot of cable.

ITEM SPECIAL, SECURITY CAMERA, FURNISH AND INSTALL

The Contractor shall furnish and install all security cameras in conformance with the City of Dublin supplemental specification where noted on the plans.

Payment shall be made at the unit bid price for each security camera installed after all cameras have been tested and accepted by the City Engineer.



POWER SERVICE SCHEMATIC DIAGRAM

(SITE LIGHTING)

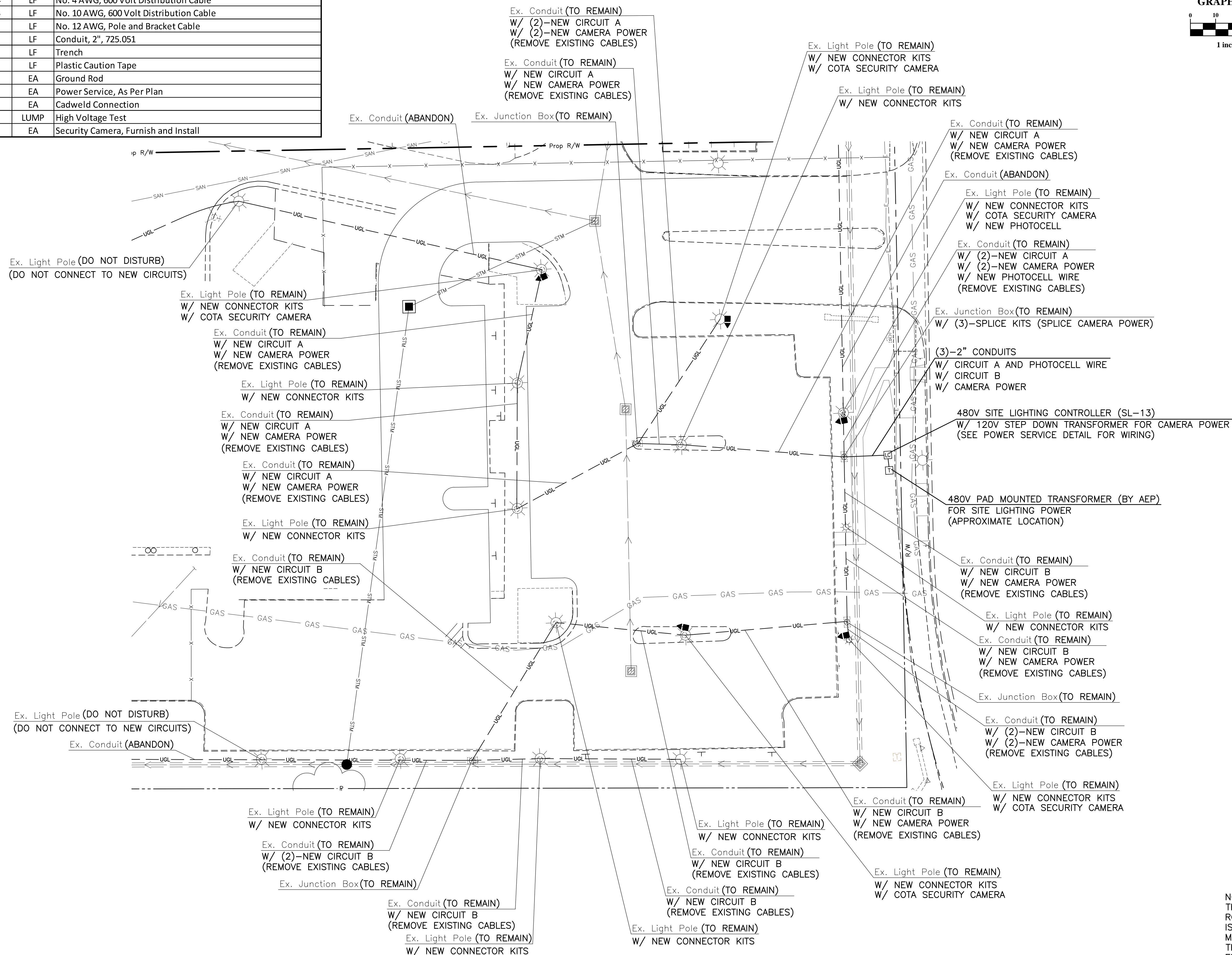
SCALE: NONE

BID SET
.....
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CONSTRUCTION**

PLAN SET DATE
July 24, 2015

REVISIONS	MARK	DATE	DESCRIPTION
<div></div> <div>INTERIM COTA PARK AND RIDE SITE LIGHTING NOTES</div>			
<div>EMHT Evans, Meacham, Hensler & Thon, Inc. 5900 New Albany Road, Columbus, OH 43254 Phone: 614.775.4500 Toll Free: 888.775.3448 emht.com</div>			
DATE July 24, 2015			
SCALE As Noted			
JOB NO. 2014-0588			
SHEET 7/10			

LIGHTING ESTIMATE OF QUANTITIES			
ITEM NO.	QTY	UNIT	ITEM DESCRIPTION
625	26	EA	Connector Kit, Type II
625	13	EA	Connector Kit, Type III
625	3404	LF	No. 4 AWG, 600 Volt Distribution Cable
625	2013	LF	No. 10 AWG, 600 Volt Distribution Cable
625	780	LF	No. 12 AWG, Pole and Bracket Cable
625	54	LF	Conduit, 2", 725.051
625	40	LF	Trench
625	40	LF	Plastic Caution Tape
625	13	EA	Ground Rod
625	2	EA	Power Service, As Per Plan
625	13	EA	Cadweld Connection
625	1	LUMP	High Voltage Test
SPECIAL	5	EA	Security Camera, Furnish and Install



GRAPHIC SCALE


0 10 20 40

1 inch = 20 feet

BID SET
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July 24, 2015

REVISIONS



City of Dublin

CITY OF DUBLIN, FRANKLIN COUNTY, OHIO
PRIVATE SITE IMPROVEMENT PLAN
FOR
**INTERIM COTA PARK AND RIDE
LIGHTING PLAN**

EMHT
Evans, Mechwart, Hambleton & Tilton, Inc.
Engineers • Surveyors • Planners • Scientists
5500 New Albany Road, Columbus, OH 43054
Phone: 614/775-4500 Toll Free: 888/775-3648

DATE
July 24, 2015

SCALE

As Noted

JOB NO.
2014-0588

SHEET

8/10

NOTE: THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING LIGHTING CIRCUIT AND CONDUIT ROUTING PRIOR TO BEGINNING ANY WORK. IF IT IS DEEMED THAT THE FIELD CONDITIONS DO NOT MATCH THE INFORMATION SHOWN ON THE PLAN, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON HOW TO PROCEED.

The diagram illustrates the proposed system. On the left, a side view shows a person's legs and feet positioned within a structure. A 'Handle' is shown at the bottom, connected to a 'Dandy Bag' (labeled 'A') which is positioned above a 'Grating' (labeled 'B'). On the right, a cross-section labeled 'SECTION A' shows the 'Dandy Bag' and 'Grating' components in detail, with the 'Dandy Bag' positioned above the 'Grating'.

Stand grate on end. Place Dandy Bag over grate. Roll grate over so that open end is up. Pull up slack. Tuck flap in. Be sure end of grate is completely covered by flap or Dandy Bag will not fit properly. Holding handles, carefully place Dandy Bag with grate inserted into catch basin frame so that red dot on the top of the Dandy Bag is visible.

With a stiff bristle broom or square point shovel remove silt & other debris off surface after each event.

Existing parking lot structures receiving flow from construction area.

This diagram illustrates a drop inlet system with a grate and filter fabric. It shows a cross-section of a drop inlet structure with a grate on top. An arrow labeled "Drop Inlet w/Grate" points to the structure. Below the grate, an arrow labeled "Sediment Laden Runoff" points to the flow of water. The flow passes through a "Filter Fabric" which is supported by a "Stake". The water that passes through the filter is labeled "Filtered Water". The filter fabric is shown being held in place by a "Compacted Soil To Prevent Piping".

This method of inlet protection is applicable where the inlet drains a relatively flat area (slopes no greater than 5 percent) where sheet or overland flows (not exceeding 0.5 cfs) are typical. This method shall not apply to inlets receiving concentrated flows, such as in street and highway medians.

1, 4, 5, 6, 7

The diagrams illustrate four methods to prevent fence pullout:

- Method 1:** Shows three vertical posts. The middle post is labeled "2"x2" Pencil sharpened 42" lg. posts". A dimension line above the posts indicates a "7'-8" O.C." (On Center) spacing. An arrow labeled "FLOW" points to the left.
- Method 2:** Shows three vertical posts. The middle post is labeled "4"x4" Fence Holding Trench". A dimension line indicates a "6" depth. An arrow labeled "FLOW" points to the left.
- Method 3:** Shows three vertical posts. The middle post is labeled "Backfill to resist fence pullout". An arrow labeled "FLOW" points to the left.
- Method 4:** Shows three vertical posts. The middle post is labeled "Backfill to resist fence pullout". An arrow labeled "FLOW" points to the left.

This sediment barrier utilizes standard strength or extra strength synthetic filter fabrics. It is designed for situations in which only sheet or overland flows are expected.

1. The height of a slit fence shall not exceed 36-inches (higher fences may impound volumes of water sufficient to cause failure of the structure).
2. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum overlap of 12-inches.
3. Posts shall be spaced a maximum of 10 feet apart at the barrier location and driven securely into the ground (minimum of 12-inches). Wood posts will be a minimum of 32" long. When extra strength fabric is used without the wire support fence, post spacing shall not exceed 6 feet.
4. A trench shall be excavated approximately 1-inch wide and 6 inches deep along the line of posts and upslope from the barrier.
5. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty rope stapled to the posts at 10-foot intervals. The fabric shall extend into the trench a minimum of 2-inches and shall not extend more than 36-inches above the original ground surface.
6. The standard strength filter fabric shall be stapled or wired to the fence, and 6-inches of the fabric shall be placed in the trench. The fabric shall not extend more than 36-inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
7. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be omitted. In this case, the filter fabric is stapled or wired directly to the posts with all other provisions of Item No. 6 applying.
8. The trench shall be backfilled and soil compacted over the filter fabric.
9. The fence shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.
10. Slit fences and filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
11. To prevent water ponded by the slit fence from flowing around the ends, each end shall be constructed upslope so that the ends are at a higher elevation.

Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly.

Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.

Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

<u>Pre-developed Areas</u>	
Total Disturbed Area	1.54 Acres
Impervious Area	1.49 Acres
Pervious Area	0.05 Acres
<u>Post-developed Areas</u>	
Total Disturbed Area	1.54 Acres
Impervious Area	0.32 Acres
Pervious Area	1.22 Acres
Impervious Area Reduced by 76%	

8' Min.

6" Min.

Hollow Out Area Line with Plastic

4' Min.

8' Min.

4' Min.

Sediment Fence

PLAN VIEW

Notes
Concrete trucks shall utilize areas to washout trucks. Accumulated concrete shall be removed from the site and disposed of properly.

See Plan

Mountable Berm

Existing Pavement

6' Min.

3'

5'

Filter Cloth

Existing Ground

PROFILE

10'

10' Min.

Existing Pavement

10'

PLAN VIEW

1. Stone Size – Use 2 inch stone, or reclaimed or recycled concrete equivalent.
2. Length – As required.
3. Thickness – Not less than six (6) inches.
4. Width – Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth – will be placed over the entire area prior to placing of stone.
6. Surface Water – All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance – The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any measures used to stabilize the area. If damaged, eroded, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing – Wheels shall be cleaned to remove sediment prior to entrance onto public right-of-ways. When washing is required, it shall be done on an area stabilized with stone.
9. Periodic inspection and needed maintenance shall be provided after each rain.

Plan Engineer:	Evans, Mechwart, Hambleton & Tilton, Inc. 5500 New Albany Road Columbus, OH 43054 Phone: (614) 775-4500 Fax: (614) 775-4800
Owner's Representative:	City of Dublin Ken Richardson 5800 Shier Rings Road Dublin, OH 43016 Phone: (614) 410-4631
On-Site Contact:	City of Dublin Ken Richardson 5800 Shier Rings Road Dublin, OH 43016 Phone: (614) 410-4631

Existing Site Conditions: The proposed development is located on approximately 9.92± acres within an existing site consisting of a car dealership. The existing topography of the site generally slopes from the east towards the west.

Existing Site Drainage Condition: Stormwater run off generated by the site discharges into an existing storm sewer system.

Proposed Site Drainage Condition: The stormwater runoff generated by the site under post-developed conditions will be collected in catch basins and piped to an existing storm sewer system.

Adjacent Areas: The site is located adjacent to the Village Parkway to the east, an open field to the north and west, and a residential development to the south.

Critical Areas: The most critical areas related to implementing the erosion and sediment control are the western boundaries.

StormWater Pollution Prevention Measures: Approximately 1.4± acres of land will be disturbed during the construction of this project. Stormwater pollution prevention will be accomplished through the implementation of the BMP's detailed on this sheet.

Sequence of Construction:

1. Install the tree protection fence and erosion control devices.
2. Relocate existing utilities, remove trees, and demolish pavement, walks and curbs.
3. Perform mass earthwork activities and begin building foundations. Install temporary seeding as needed.
4. Install storm sewer and other utilities.
5. Construct remainder of building.
6. Fine grade the site and install paving and landscape.
7. Once site is stabilized, remove tree protection and erosion control devices.


CONTRACTOR RESPONSIBILITY: Details have been provided on the plans in an effort to help the Contractor provide erosion and sedimentation control. The details shown on the plan shall be considered a minimum. Additional or alternate details may be found in the O.D.N.R. Manual "Rainwater and Land Development." The Contractor shall be solely responsible for providing necessary and adequate measures for proper control of erosion and sediment runoff from the site along with proper maintenance and inspection in compliance with the NPDES General Permit for Stormwater Discharges Associated with Construction Activity.

All Erosion & Sediment Control practices are subject to Field Modification at the direction of the City of Dublin and/or Ohio EPA.

.....
**NOT TO BE USED FOR
 CONSTRUCTION**

PLAN SET DATE
July 24, 2015

MARK	DATE	DESCRIPTION
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City of Dublin

CITY OF DUBLIN, FRANKLIN COUNTY, OHIO
PRIVATE SITE IMPROVEMENT PLAN
FOR
INTERIM COTA PARK AND RIDE
SEDIMENT AND EROSION CONTROL DETAILS

EMHT
Evans, Mechwart, Hambleton & Tilton, Inc.
Engineers • Surveyors • Planners • Scientists
5500 New Albany Road, Columbus, OH 43054
Phone: 614.775.4500 Toll Free: 888.775.3448
emht.com

July 24, 2015

None

2014-0588

10/10